

MANUFACTURING EXTENSION PARTNERSHIP

Success Stories from the Field

Nichols Aluminum

Mid-America Manufacturing Technology Center - Colorado

Nichols Aluminum Jump-Starts Lean Manufacturing with 5S

Client Profile:

Nichols Aluminum, located in Fort Lupton, Colorado, is a leading manufacturer of coated and mill finish aluminum sheet. Its products are used in a variety of industry markets including building and construction, transportation, machinery and equipment, consumer durable, electrical and container packaging. Established in 1984, Nichols Aluminum became a division of Quanex in 2000 and currently employs 220 people.

Situation:

Quanex began a company-wide initiative to get all its facilities to adopt Lean Manufacturing to increase productivity, improve quality and maintain safe working conditions. Nichols Aluminum decided to jump-start its Lean implementation by initiating 5S throughout its facility. Nichols Aluminum contacted the Mid-America Manufacturing Technology Center (MAMTC), a NIST MEP affiliate, for help.

Solution:

5S is a system to improve and standardize the work environment for safe and effective operation. Establishing an organized workplace is essential to begin creating lean manufacturing cells. Loosely translated from Japanese, the 5S stands for sorting, storage, shining, standardizing and sustaining. MAMTC conducted introduction sessions on 5S for each department of the facility to educate employees on the basics of the philosophy. Afterward, each department ran an 8- to 10-hour 5S event to put the philosophy into practice. Employees eliminated any non-essential objects from their work areas, thoroughly cleaned everything, created logical storage strategies for equipment and supplies and created standardized procedures to sustain the new level of cleanliness. Within two months, the entire plant had undergone 5S transformation.

After completing the 5S project, the company not only saw an improved working atmosphere, but also improved company morale. Employees involved in the decision making process of the 5S implementation had increased pride of their workstations and their work. Nichols Aluminum has always had an excellent safety record, one that was steadily improving every year. Now, with 5S in place, they have seen an even greater increase to their safety record. Tom Brackman, Nichols Aluminum Vice President and General Manager, says that many have told him that it is the best looking aluminum plant they've ever visited. With 5S under their belt, the company plans to continue implementing Lean principles to its operation for increased productivity and profitability.

Results:

- * Increased efficiency and organization of work areas.
- * Boosted employee morale.
- * Improved company safety record.

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Testimonial:

"Lean Manufacturing is a difficult concept for our folks to grasp in this type of process business. With the implementation of 5S, we have been able to provide concrete evidence to our employees of the benefits of Lean, a building block that is enabling us to move into more Lean efforts that continue to favorably impact the business."

Tom Brackmann, Vice President and General Manager